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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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DIGEO, INC.
8815 122ND NE
KIRKLAND, WA 98033

EXAMINER	
KOENIG, ANDREW Y	
ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/877,696	ISTVAN ET AL.	
	Examiner	Art Unit	
	Andrew Y. Koenig	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 25 July 2006 have been fully considered but they are not persuasive.

2. The declaration filed on 12 July 2006 under 37 CFR 1.131 has been considered but is ineffective to overcome the Zustak reference.

The declaration filed on 12 July 2006 appears to have been made by the assignee or other party in interest, which is inappropriate when it is possible to produce the affidavit or declaration of the inventor (see MPEP 715.04 (I)).

For the sake of compact prosecution, the examiner has introduced additional rejections providing that the applicant overcomes the rejections with Zustak.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 28-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 28 recites "an electronic program guide, comprising:" and proceeds to list data structure elements. Thus, the claim is recites merely a data structure per se, which is non-functional descriptive material.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5, 7-15, 18-32, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) in view of U.S. Patent Application Publication 2002/0157098 to Zustak et al. (hereafter Zustak).

Regarding claim 1, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches the user selecting the channel, which is then used to reference the service table, which reads on communicating the interactive programming content including the interactive content element and the corresponding synthetic channel to the viewer. Further, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60). Further, LaJoie teaches descriptive information can be displayed in an interactive

program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches providing content elements (such as web sites) and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 2, LaJoie teaches a remote having a plurality of numbered actuatable buttons (col. 15-16, ll. 57-9).

Regarding claim 3, LaJoie teaches e-mail service (col. 16, ll. 24-28), which reads on an interactive content element comprising a computer implemented user application.

Regarding claim 4, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

Regarding claim 5, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently uses a user application in order to provide the e-mail information to the user.

Regarding claim 7, LaJoie teaches a still image library service (col. 16, ll. 24-28), which reads on a photo album.

Regarding claim 8, LaJoie teaches accessing the WWW browser to access information on the headend (col. 17-18, ll. 30-10), however LaJoie is silent on explicitly disclosing accessing an Internet site. Zustak teaches accessing servers 14 and 18 via the Internet (24), see figure 1 (pg. 2, para. 0026), which reads on accessing an Internet site. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie to access an Internet site as taught by Zustak in order to facilitate accessing Internet information with ease (Zustak: pg. 1, para. 0005-0006).

Regarding claim 9, LaJoie teaches accessing services at the headend using a URL scheme (col. 17-18, ll. 30-10), which equates to a content page comprising a page designated by a user via a unique address.

Regarding claim 10, LaJoie teaches accessing information at the headend (col. 17-18, ll. 30-10), which reads on a page maintained on a local server.

Regarding claim 11, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing broadcast channels and interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one

interactive content element (such as discussed above) via the interactive television system. LaJoie teaches receiving user selections of channels, which is then used to reference the service table, which reads on communicating the interactive programming content including correlating the synthetic channel to the interactive content element. LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60), wherein the retrieved selected content element is a service such as web browsing, wherein the information is retrieved from a remote location (col. 17-18, ll. 30-10). LaJoie teaches displaying the information from the set top terminal on a television (col. 14, ll. 46-57). LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches providing content elements (such as web sites) and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 12, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60).

Regarding claim 13, the combination of LaJoie and Zustak teaches selecting a synthetic channel directly from the EPG (Zustak: pg. 4, para. 0044,0047, pg. 5, 0053).

Regarding claim 14, LaJoie teaches a table for correlating the interactive content elements to channels (see fig. 5), wherein the table is inherently accomplished by an application at the client device, which is resident in memory (32) and controlled by the CPU (30), see fig. 3, which reads on correlating accomplished via a controller executing a computer implemented application.

Regarding claim 15, LaJoie teaches the use of database services at the headend (see fig. 1) (col. 10, ll. 20-29), which by definition would have a database. Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include at least an uplink signal to the headend (claimed broadcast center), comprising a request for a service (claimed interactive element) via the transmitter (col. 14, ll. 40-45), and receiving the information (col. 14, ll. 1-30, col. 17-18, ll. 30-10).

Regarding claim 18, LaJoie teaches supporting the display device as a television (col. 14, ll. 46-57), but is silent on a television per se. Zustak teaches a television (fig. 1, label 22), pg. 2, para. 0026-0027. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by displaying information on a television as taught by Zustak in order to display information

using a known output device thereby providing a consistent display of information across different televisions while using a well known display device.

Regarding claim 19, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently reads on an interactive content element comprising a computer implemented user application in order to provide the e-mail information to the user.

Regarding claim 20, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a server at the remote location (col. 17-18, ll. 58-10).

Regarding claim 21, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a system page (col. 17-18, ll. 58-10).

Regarding claim 22, LaJoie teaches a set top terminal capable of being connected to a television set (col. 14, ll. 46-57). LaJoie teaches having a network interface configured to transmit and receive encoded communications channels (col. 14, ll. 1-30). LaJoie teaches a headend (claimed broadcast center) in communication with the client terminal (col. 12-13, ll. 60-5), wherein information is sent from the headend to the terminal including guide information (col. 14, ll. 1-30). LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing broadcast channels and interactive content as

part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches receiving user selections of channels, which is then used to reference the service table, which reads on communicating the interactive programming content including correlating the synthetic channel to the interactive content element. LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60), wherein the retrieved selected content element is a service such as web browsing, wherein the information is retrieved from a remote location (col. 17-18, ll. 30-10). LaJoie teaches displaying the information from the set top terminal on a television (col. 14, ll. 46-57). Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include at least an uplink signal to the headend (claimed broadcast center), comprising a request for a service (claimed interactive element) via the transmitter (col. 14, ll. 40-45), and receiving the information (col. 14, ll. 1-30, col. 17-18, ll. 30-10). LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV

device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches providing content elements (such as web sites) and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Further, LaJoie is silent on a television per se. Zustak teaches a television (fig. 1, label 22), pg. 2, para. 0026-0027. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by displaying information on a television as taught by Zustak in order to display information using a known output device thereby providing a consistent display of information across different televisions while using a well known display device.

Regarding claim 23, the combination of LaJoie and Zustak teaches selecting a synthetic channel directly from the EPG (Zustak: pg. 4, para. 0044,0047, pg. 5, 0053).

Regarding claim 24, LaJoie teaches synthetic channels comprising functional channels (see fig. 5, col. 17-18, ll. 30-10) and content channels (e-mail)(col. 16, ll. 24-28).

Regarding claim 25, LaJoie teaches executing a WWW browser (col. 17, ll. 44-51), which equates to functional channels corresponding to interactive programming content, including applications that are executed on behalf of the viewer.

Regarding claim 26, claim 26 modifies a content channel, which is written in the alternative of claim 24. Consequently, dependent claim 26 does not add a limitation in that the examiner has already treated the functional channel of claim 24.

Regarding claim 27, claim 27 modifies a system channel, which is written in the alternative of claim 24. Consequently, dependent claim 27 does not add a limitation in that the examiner has already treated the functional channel of claim 24.

Regarding claim 28, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. Consequently, LaJoie teaches the claimed channel field (fig. 5, label 101) listing the available cable channels and available synthetic channels and content fields including a current programming schedule for each available cable channel and interactive content element corresponding to each available synthetic channel. LaJoie teaches showing the cable channels in an electronic program guide (fig. 16 and 17). However, LaJoie is silent on showing synthetic channels via an electronic program guide (EPG).

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV

device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches showing synthetic channels via an electronic program guide (EPG) by providing web sites and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing virtual channels in an EPG for the selection of synthetic channels as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 29, LaJoie teaches synthetic channels comprising functional channels (see fig. 5, col. 17-18, ll. 30-10) and content channels (e-mail)(col. 16, ll. 24-28).

Regarding claim 30, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently uses a user application in order to provide the e-mail information to the user.

Regarding claim 31, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

Regarding claim 32, LaJoie teaches accessing the WWW browser to access information on the headend (col. 17-18, ll. 30-10), however LaJoie is silent on explicitly disclosing accessing an Internet site. Zustak teaches accessing servers 14 and 18 via the Internet (24), see figure 1 (pg. 2, para. 0026), which reads on accessing an Internet site. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie to access an Internet site as taught by Zustak

in order to facilitate accessing Internet information with ease (Zustak: pg. 1, para. 0005-0006).

Regarding claim 34, LaJoie teaches a content page designated by a user via a unique address (col. 17-18, ll. 30-10).

Regarding claim 35, LaJoie teaches application servers (fig. 1, label 15) for providing an interactive program guide (IPG) (col. 10, ll. 20-41), which clearly is implemented on a computer readable medium containing instructions for transmitting a guide to a client. LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. Consequently, LaJoie teaches the claimed channel field (fig. 5, label 101) listing the available cable channels and available synthetic channels and content fields including a current programming schedule for each available cable channel and interactive content element corresponding to each available synthetic channel. Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include receiving an uplink signal at the headend, comprising a request for a service, retrieving the information from

a server (col. 17-18, ll. 30-10), which inherently has a memory of some form in order to provide the requested information, and transmitting the interactive content element to the user. LaJoie teaches showing the cable channels in an electronic program guide (fig. 16 and 17). However, LaJoie is silent on showing synthetic channels via an electronic program guide (EPG).

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches showing synthetic channels via an electronic program guide (EPG) by providing web sites and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing virtual channels in an EPG for the selection of synthetic channels as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 36, LaJoie teaches the use of a web browser application, which reads on the interactive content element comprising a computer implemented user application (col. 17-18, ll. 30-10).

Regarding claim 37, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

6. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) in view of U.S. Patent Application Publication 2002/0157098 to Zustak et al. (hereafter Zustak), U.S. Patent Application Publication 2003/0005463 to Macrae et al. (hereafter Macrae), and U.S. Patent Application Publication 2005/0044577 to Jerding et al. (hereafter Jerding).

Regarding claim 38, LaJoie teaches navigating using the remote control, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches the user selecting the channel, which is then used to reference the service table, which reads on communicating the interactive programming content including the interactive content element and correlating the synthetic channel to the viewer. Further, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60). Further, LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content

elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Zustak teaches an electronic program guide (see fig. 6), which shows channels along with virtual channels (106) that can access Web sites on the ITV device or on a Web Server (pg. 4, para. 0046-0047). Accordingly, Zustak teaches providing content elements (such as web sites) and providing selection of the web sites (pg. 1, para. 0009, pg. 4, para. 0046-0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Zustak in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

LaJoie teaches the use of commands with an IPG, but is silent on a second interactive command selecting a synthetic channel by way of the guide. Zustak teaches a second interactive command selecting a synthetic channel by way of the guide (pg. 4, para. 0044). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by a second interactive command selecting a synthetic channel by way of the guide as taught by Zustak in order to provide an easy-to-use interface and facilitating the user to select a desired channel.

LaJoie teaches the use of a browser and accessing remote sites (col. 16, ll. 24-28), consequently; LaJoie teaches retrieving interactive content (information received for use with the browser) and displaying the interactive content.

Further, LaJoie teaches browsing but does not explicitly disclose providing interaction with the content via the remote control, receiving a third command from a remote control to retrieve and display a second content, where the second content is linked to the first content, receiving a fourth command from a remote control to retrieve and display a third content, where the third content is linked to the second content. In analogous art, Macrae teaches enabling the user to scroll through pages with a remote control device (pg. 3, para. 0031), which equates to providing interaction with the interactive content element by commands received from the remote control. Macrae teaches scrolling the web page and using the remote control to access additional information (in this case a third command from a remote control to receive and display a second content, where the second content is linked to the second content) (pg. 3, para. 0033). Further, Macrae teaches that it is desirable to link to additional Internet site addresses, accordingly, Macrae teaches providing additional links on other pages for the purposes of accessing more information. Consequently, Macrae teaches receiving a fourth command from a remote control to retrieve and display a third content, where the third content is linked to the second content, in that the content is web information linked together by plural pages (pg. 1, para. 0008, pg. 3, para. 0033). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by providing interaction with the content via the remote control, receiving a third command from a remote control to retrieve and display a second content, where the second content is linked to the first content, receiving a fourth command from a remote control to retrieve and display a third content, where the third

content is linked to the second content as taught by Macrae in order to enable the user to "surf" through Internet content using the set top box thereby enabling more information to be easily accessed and presented to the user.

LaJoie is silent on receiving a first interactive command from a remote control to activate an electronic program guide. In analogous art, Jerding teaches a command from a remote control to activate an electronic program guide (fig. 6, label 71, pg. 7-8, para. 0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by having a command from a remote control to activate an electronic program guide as taught by Jerding in order to enable the user to quickly identify and access information in the program guide.

Regarding claim 39, LaJoie teaches accessing information via a web browser, but is silent on receiving at least one additional command to link to an additional interactive content element, wherein the additional interactive content element is linked to a previous interactive content element, retrieving the element from a remote location, and displaying the element on the display. As discussed in claim 38, Macrae teaches having plural links to different sites (see page 3), wherein the additional command is linked to an additional content element (which is linked to a previous content element), retrieving the element and displaying the information to the user (pg. 3, para. 0028, 0033, pg. 5, para. 0052). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by receiving at least one additional command to link to an additional interactive content element, wherein the additional interactive content element is linked to a previous interactive content element,

retrieving the element from a remote location, and displaying the element as taught by Macrae in order to enable the user to "surf" through Internet content using the set top box thereby enabling more information to be easily accessed and presented to the user.

7. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent Application Publication 2002/0157098 to Zustak et al. (hereafter Zustak) in view of U.S. Patent Application Publication 2005/0044577 to Jerding et al. (hereafter Jerding).

Regarding claim 6, LaJoie and Zustak are silent on the use of an event calendar. Jerding teaches the use of a calendar application (pg. 3, para. 0027), which equates to an event calendar. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by incorporating a calendar as taught by Jerding in order to enable the user to easily determine the date thereby providing the user with plural selectable options and easily accessing information.

Regarding claim 17, LaJoie teaches receiving information, but is silent on the headend broadcasting using a carousel technique. Jerding teaches the use of a carousel for continually broadcasting information to users (pg. 4-5, para. 0039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by using the carousel broadcasting as taught by Jerding in order to continually broadcast information and providing current information.

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent Application Publication 2002/0157098 to Zustak et al. (hereafter Zustak) in view of U.S. Patent 5,940,073 to Klosterman et al. (hereafter Klosterman).

Regarding claim 33, LaJoie teaches accessing information from the WWW browser, but is silent on accessing a page other than a home page. In analogous art, Klosterman teaches accessing web pages other than a home page (fig. 6(c)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by accessing web pages other than the home page as taught by Klosterman in order to enable the user to directly access desirable information.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent Application Publication 2002/0157098 to Zustak et al. (hereafter Zustak) in view of U.S. Patent 6,526,577 to Knudson et al. (hereafter Knudson).

Regarding claim 16, LaJoie is silent on the uplink and downlink signals comprising communications encoded in a data over cable service interface specification (DOCSIS) protocol. In analogous art, Knudson teaches bidirectional communication using a DOCSIS compliant cable modem (col. 5, ll. 40-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by using a cable modem as taught by Knudson in order to benefit from

using the same communication channel while supporting a known bi-directional protocol.

10. Claims 1-5, 7-15, 18-32, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) in view of U.S. Patent 6,684,399 to Grooters.

Regarding claim 1, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches the user selecting the channel, which is then used to reference the service table, which reads on communicating the interactive programming content including the interactive content element and the corresponding synthetic channel to the viewer. Further, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60). Further, LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the

interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-46). Accordingly, Grooters teaches providing content elements and providing selection of the web sites (col. 7. ll. 38-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 2, LaJoie teaches a remote having a plurality of numbered actuatable buttons (col. 15-16, ll. 57-9).

Regarding claim 3, LaJoie teaches e-mail service (col. 16, ll. 24-28), which reads on an interactive content element comprising a computer implemented user application.

Regarding claim 4, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

Regarding claim 5, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently uses a user application in order to provide the e-mail information to the user.

Regarding claim 7, LaJoie teaches a still image library service (col. 16, ll. 24-28), which reads on a photo album.

Regarding claim 8, LaJoie teaches accessing the WWW browser to access information on the headend (col. 17-18, ll. 30-10), however LaJoie is silent on explicitly disclosing accessing an Internet site. Grooters teaches accessing an Internet site (col. 6-7, ll. 54-19, col. 7, ll. 38-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie to access an Internet site as taught by Grooters in order to facilitate accessing Internet information with ease.

Regarding claim 9, LaJoie teaches accessing services at the headend using a URL scheme (col. 17-18, ll. 30-10), which equates to a content page comprising a page designated by a user via a unique address.

Regarding claim 10, LaJoie teaches accessing information at the headend (col. 17-18, ll. 30-10), which reads on a page maintained on a local server.

Regarding claim 11, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing broadcast channels and interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches receiving user selections of channels, which is then used to reference the service table, which reads on communicating the interactive programming content including correlating the synthetic channel to the interactive content element.

LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60), wherein the retrieved selected content element is a service such as web browsing, wherein the information is retrieved from a remote location (col. 17-18, ll. 30-10). LaJoie teaches displaying the information from the set top terminal on a television (col. 14, ll. 46-57). LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-41). Accordingly, Grooters teaches providing content elements and providing selection of the web sites (col. 7, ll. 38-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 12, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60).

Regarding claim 13, the combination of LaJoie and Grooters teaches selecting a synthetic channel directly from the EPG (Grooters: fig. 4, labels 901-903, col. 7, ll. 43-46).

Regarding claim 14, LaJoie teaches a table for correlating the interactive content elements to channels (see fig. 5), wherein the table is inherently accomplished by an application at the client device, which is resident in memory (32) and controlled by the CPU (30), see fig. 3, which reads on correlating accomplished via a controller executing a computer implemented application.

Regarding claim 15, LaJoie teaches the use of database services at the headend (see fig. 1) (col. 10, ll. 20-29), which by definition would have a database. Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include at least an uplink signal to the headend (claimed broadcast center), comprising a request for a service (claimed interactive element) via the transmitter (col. 14, ll. 40-45), and receiving the information (col. 14, ll. 1-30, col. 17-18, ll. 30-10).

Regarding claim 18, LaJoie teaches supporting the display device as a television (col. 14, ll. 46-57), but is silent on a television per se. Grooters teaches a television (col. 3, ll. 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by displaying information on a television as taught by Grooters in order to display information using a known output device thereby providing a consistent display of information across different televisions while using a well known display device.

Regarding claim 19, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently reads on an interactive content element comprising a computer implemented user application in order to provide the e-mail information to the user.

Regarding claim 20, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a server at the remote location (col. 17-18, ll. 58-10).

Regarding claim 21, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a system page (col. 17-18, ll. 58-10).

Regarding claim 22, LaJoie teaches a set top terminal capable of being connected to a television set (col. 14, ll. 46-57). LaJoie teaches having a network interface configured to transmit and receive encoded communications channels (col. 14, ll. 1-30). LaJoie teaches a headend (claimed broadcast center) in communication with the client terminal (col. 12-13, ll. 60-5), wherein information is sent from the headend to the terminal including guide information (col. 14, ll. 1-30). LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing broadcast channels and interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed

above) via the interactive television system. LaJoie teaches receiving user selections of channels, which is then used to reference the service table, which reads on communicating the interactive programming content including correlating the synthetic channel to the interactive content element. LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60), wherein the retrieved selected content element is a service such as web browsing, wherein the information is retrieved from a remote location (col. 17-18, ll. 30-10). LaJoie teaches displaying the information from the set top terminal on a television (col. 14, ll. 46-57). Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include at least an uplink signal to the headend (claimed broadcast center), comprising a request for a service (claimed interactive element) via the transmitter (col. 14, ll. 40-45), and receiving the information (col. 14, ll. 1-30, col. 17-18, ll. 30-10). LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-41). Accordingly, Grooters teaches providing content elements and providing selection

of the web sites (col. 7, ll. 38-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Further, LaJoie is silent on a television per se. Grooters teaches a television (col. 3, ll. 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by displaying information on a television as taught by Grooters in order to display information using a known output device thereby providing a consistent display of information across different televisions while using a well known display device.

Regarding claim 23, the combination of LaJoie and Grooters teaches selecting a synthetic channel directly from the EPG (Grooters: fig. 4, labels. 901-903, col. 7, ll. 38-46).

Regarding claim 24, LaJoie teaches synthetic channels comprising functional channels (see fig. 5, col. 17-18, ll. 30-10) and content channels (e-mail)(col. 16, ll. 24-28).

Regarding claim 25, LaJoie teaches executing a WWW browser (col. 17, ll. 44-51), which equates to functional channels corresponding to interactive programming content, including applications that are executed on behalf of the viewer.

Regarding claim 26, claim 26 modifies a content channel, which is written in the alternative of claim 24. Consequently, dependent claim 26 does not add a limitation in that the examiner has already treated the functional channel of claim 24.

Regarding claim 27, claim 27 modifies a system channel, which is written in the alternative of claim 24. Consequently, dependent claim 27 does not add a limitation in that the examiner has already treated the functional channel of claim 24.

Regarding claim 28, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. Consequently, LaJoie teaches the claimed channel field (fig. 5, label 101) listing the available cable channels and available synthetic channels and content fields including a current programming schedule for each available cable channel and interactive content element corresponding to each available synthetic channel. LaJoie teaches showing the cable channels in an electronic program guide (fig. 16 and 17). However, LaJoie is silent on showing synthetic channels via an electronic program guide (EPG).

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can

access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-41). Accordingly, Grooters teaches providing content elements and providing selection of the web sites (col. 7, ll. 38-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 29, LaJoie teaches synthetic channels comprising functional channels (see fig. 5, col. 17-18, ll. 30-10) and content channels (e-mail)(col. 16, ll. 24-28).

Regarding claim 30, LaJoie teaches e-mail service (col. 16, ll. 24-28), which inherently uses a user application in order to provide the e-mail information to the user.

Regarding claim 31, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

Regarding claim 32, LaJoie teaches accessing the WWW browser to access information on the headend (col. 17-18, ll. 30-10), however LaJoie is silent on explicitly disclosing accessing an Internet site. Grooters accessing an Internet site (col. 6-7, ll. 54-19, col. 7, ll. 38-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie to access an Internet site as taught by Grooters in order to facilitate accessing Internet information with ease.

Regarding claim 34, LaJoie teaches a content page designated by a user via a unique address (col. 17-18, ll. 30-10).

Regarding claim 35, LaJoie teaches application servers (fig. 1, label 15) for providing an interactive program guide (IPG) (col. 10, ll. 20-41), which clearly is implemented on a computer readable medium containing instructions for transmitting a guide to a client. LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. Consequently, LaJoie teaches the claimed channel field (fig. 5, label 101) listing the available cable channels and available synthetic channels and content fields including a current programming schedule for each available cable channel and interactive content element corresponding to each available synthetic channel. Upon initiating the browsing service, LaJoie teaches establishing a browsing session with the headend, and requesting a service which resides at the headend, which would clearly include receiving an uplink signal at the headend, comprising a request for a service, retrieving the information from a server (col. 17-18, ll. 30-10), which inherently has a memory of some form in order to provide the requested information, and transmitting the interactive content element to

the user. LaJoie teaches showing the cable channels in an electronic program guide (fig. 16 and 17). However, LaJoie is silent on showing synthetic channels via an electronic program guide (EPG).

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-41). Accordingly, Grooters teaches providing content elements and providing selection of the web sites (col. 7, ll. 38-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

Regarding claim 36, LaJoie teaches the use of a web browser application, which reads on the interactive content element comprising a computer implemented user application (col. 17-18, ll. 30-10).

Regarding claim 37, LaJoie teaches World Wide Web (WWW) browsing service (col. 16, ll. 24-28), which refers to web-pages maintained at the headend, which equates to a network storage location (col. 17-18, ll. 58-10).

11. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) in view of U.S. Patent 6,684,399 to Grooters, U.S. Patent Application Publication 2003/0005463 to Macrae et

al. (hereafter Macrae), and U.S. Patent Application Publication 2005/0044577 to Jerding et al. (hereafter Jerding).

Regarding claim 38, LaJoie teaches navigating using the remote control, LaJoie teaches a channel look-up table (fig. 5), which shows the channel table (101) and service table (111). LaJoie teaches the channel table for accessing content such as interactive contact of home shopping service, image library service, an online database service, a World Wide Web (WWW) browsing service, an e-mail service by selecting channel 16 (col. 16, ll.10-28), which equates to accessing interactive content as part of an interactive television system, and assigning a synthetic channel (channel 16 of the channel table) to at least one interactive content element (such as discussed above) via the interactive television system. LaJoie teaches the user selecting the channel, which is then used to reference the service table, which reads on communicating the interactive programming content including the interactive content element and correlating the synthetic channel to the viewer. Further, LaJoie teaches providing selecting of the synthetic channel by user selection via a user actuateable device (keypad, remote control) (col. 14-15, ll. 60-9, fig. 3, labels. 59, 60). Further, LaJoie teaches descriptive information can be displayed in an interactive program guide (col. 16, ll. 45-51). However, LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via from an EPG.

In analogous art, Grooters teaches an electronic program guide (see fig. 4), which shows channels along with virtual channels (fig. 4, labels 901-903) that can

access Web sites on the ITV device or on a Web Server (col. 6-7, ll. 54-19, col. 7, ll. 38-41). Accordingly, Grooters teaches providing content elements and providing selection of the web sites (col. 7, ll. 38-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by showing and selecting virtual channels in an EPG for the selection of content elements as taught by Grooters in order to facilitate the user to browse programming along with additional services thereby enabling the user to access information easily.

LaJoie teaches the use of commands with an IPG, but is silent on a second interactive command selecting a synthetic channel by way of the guide. Grooters teaches a second interactive command selecting a synthetic channel by way of the guide (col. 7, ll.43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by a second interactive command selecting a synthetic channel by way of the guide as taught by Grooters in order to provide an easy-to-use interface and facilitating the user to select a desired channel.

LaJoie teaches the use of a browser and accessing remote sites (col. 16, ll. 24-28), consequently; LaJoie teaches retrieving interactive content (information received for use with the browser) and displaying the interactive content.

Further, LaJoie teaches browsing but does not explicitly disclose providing interaction with the content via the remote control, receiving a third command from a remote control to retrieve and display a second content, where the second content is linked to the first content, receiving a fourth command from a remote control to retrieve

and display a third content, where the third content is linked to the second content. In analogous art, Macrae teaches enabling the user to scroll through pages with a remote control device (pg. 3, para. 0031), which equates to providing interaction with the interactive content element by commands received from the remote control. Macrae teaches scrolling the web page and using the remote control to access additional information (in this case a third command from a remote control to receive and display a second content, where the second content is linked to the second content) (pg. 3, para. 0033). Further, Macrae teaches that it is desirable to link to additional Internet site addresses, accordingly, Macrae teaches providing additional links on other pages for the purposes of accessing more information. Consequently, Macrae teaches receiving a fourth command from a remote control to retrieve and display a third content, where the third content is linked to the second content, in that the content is web information linked together by plural pages (pg. 1, para. 0008, pg. 3, para. 0033). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by providing interaction with the content via the remote control, receiving a third command from a remote control to retrieve and display a second content, where the second content is linked to the first content, receiving a fourth command from a remote control to retrieve and display a third content, where the third content is linked to the second content as taught by Macrae in order to enable the user to "surf" through Internet content using the set top box thereby enabling more information to be easily accessed and presented to the user.

LaJoie is silent on receiving a first interactive command from a remote control to activate an electronic program guide. In analogous art, Jerding teaches a command from a remote control to activate an electronic program guide (fig. 6, label 71, pg. 7-8, para. 0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by having a command from a remote control to activate an electronic program guide as taught by Jerding in order to enable the user to quickly identify and access information in the program guide.

Regarding claim 39, LaJoie teaches accessing information via a web browser, but is silent on receiving at least one additional command to link to an additional interactive content element, wherein the additional interactive content element is linked to a previous interactive content element, retrieving the element from a remote location, and displaying the element on the display. As discussed in claim 38, Macrae teaches having plural links to different sites (see page 3), wherein the additional command is linked to an additional content element (which is linked to a previous content element), retrieving the element and displaying the information to the user (pg. 3, para. 0028, 0033, pg. 5, para. 0052). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by receiving at least one additional command to link to an additional interactive content element, wherein the additional interactive content element is linked to a previous interactive content element, retrieving the element from a remote location, and displaying the element as taught by Macrae in order to enable the user to "surf" through Internet content using the set top box thereby enabling more information to be easily accessed and presented to the user.

12. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent 6,684,399 to Grooters in view of U.S. Patent Application Publication 2005/0044577 to Jerding et al. (hereafter Jerding).

Regarding claim 6, LaJoie and Grooters are silent on the use of an event calendar. Jerding teaches the use of a calendar application (pg. 3, para. 0027), which equates to an event calendar. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by incorporating a calendar as taught by Jerding in order to enable the user to easily determine the date thereby providing the user with plural selectable options and easily accessing information.

Regarding claim 17, LaJoie teaches receiving information, but is silent on the headend broadcasting using a carousel technique. Jerding teaches the use of a carousel for continually broadcasting information to users (pg. 4-5, para. 0039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by using the carousel broadcasting as taught by Jerding in order to continually broadcast information and providing current information.

13. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent 6,684,399 to Grooters in view of U.S. Patent 5,940,073 to Klosterman et al. (hereafter Klosterman).

Regarding claim 33, LaJoie teaches accessing information from the WWW browser, but is silent on accessing a page other than a home page. In analogous art, Klosterman teaches accessing web pages other than a home page (fig. 6(c)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by accessing web pages other than the home page as taught by Klosterman in order to enable the user to directly access desirable information.

14. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,850,218 to LaJoie et al. (hereafter LaJoie) and U.S. Patent 6,684,399 to Grooters in view of U.S. Patent 6,526,577 to Knudson et al. (hereafter Knudson).

Regarding claim 16, LaJoie is silent on the uplink and downlink signals comprising communications encoded in a data over cable service interface specification (DOCSIS) protocol. In analogous art, Knudson teaches bidirectional communication using a DOCSIS compliant cable modem (col. 5, ll. 40-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LaJoie by using a cable modem as taught by Knudson in order to benefit from using the same communication channel while supporting a known bi-directional protocol.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Koenig whose telephone number is (571) 272-7296. The examiner can normally be reached on M-Fr (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Y Koenig
Primary Examiner
Art Unit 2623

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